



Docket No.: M4065.0479/P479
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen L. Casper et al.

Application No.: 10/076,486

Group Art Unit: 2818

Filed: February 19, 2002

Examiner: M. Tran

For: PROGRAMMABLE CONDUCTOR
RANDOM ACCESS MEMORY AND
METHOD FOR SENSING SAME

FOURTH INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the subject matter of the documents be expressly considered during the prosecution of this application and that the documents be made of record therein and appear among the "References Cited" on any patent to issue from this application. A copy of each document is attached.

Also attached is a copy of an International Search Report and of an International Preliminary Examination Report which issued in the corresponding international application. The cited documents have been provided to the Examiner in previously filed Information Disclosure Statements.

This Fourth Information Disclosure Statement is being filed concurrently with a Request for Continued Examination. While the application has been allowed, Applicants respectfully request that each reference included with this Fourth Information Disclosure Statement be fully considered.

Further, while the Notice of Allowance dated November 25, 2003 states that the Information Disclosure Statement filed September 16, 2003 has been considered, it is unclear from this statement whether only those references included in the Third Information Disclosure Statement filed September 16, 2003 were considered or whether, in addition to those references, the Examiner also considered the references included with the Information Disclosure Statement filed August 7, 2002 and the references included with the Second Information Disclosure Statement filed September 26, 2002 (copies of which, along with stamped postcard receipts, were enclosed with the Third Information Disclosure Statement filed September 16, 2003).

Applicants here again request that the Examiner initial the Forms 1449 enclosed with each of the original, Second and Third Information Disclosure Statements (copies of which are being refiled herewith for convenience). Applicants also request that the Examiner initial the Form 1449 being filed together with this Fourth Information Disclosure Statement.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Fourth Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. It is submitted that this Fourth Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider and cite the listed documents.

Dated: February 24, 2004

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No. 28,371

Salvatore P. Tamburo

Registration No. 45,153

DICKSTEIN SHAPIRO MORIN &

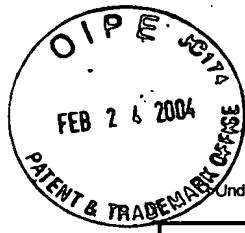
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Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicants



Approved for use through 07/31/2006. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/076,486
Sheet	1	of	2	Filing Date	February 19, 2002
				First Named Inventor	Stephen L. Casper
				Art Unit	2818
				Examiner Name	M. Tran
				Attorney Docket Number	M4065.0479/P479

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
DA		2002/0123169 A1	09/2002	Moore et al.	
DB		2002/0123248 A1	09/2002	Moore et al.	
DC		2002/0132417 A1	09/2002	Li	
DD		2002/0168852 A1	11/2002	Harshfield et al.	
DE		2002/0190289 A1	12/2002	Harshfield et al.	
DF		2003/0032254 A1	02/2003	Gilton	
DG		2003/0038301 A1	02/2003	Moore	
DH		2003/0043631 A1	03/2003	Gilton et al.	
DI		2003/0045049 A1	03/2003	Campbell et al.	
DJ		2003/0045054 A1	03/2003	Campbell et al.	
DK		2003/0047765 A1	03/2003	Campbell	
DL		2003/0047772 A1	03/2003	Li	
DM		2003/0047773 A1	03/2003	Li	
DN		2003/0048519 A1	03/2003	Kozicki	
DO		2003/0049912 A1	03/2003	Campbell et al.	
DP		2003/0068861 A1	04/2003	Li et al.	
DQ		2003/0068862 A1	04/2003	Li et al.	
DR		2003/0095426 A1	05/2003	Hush et al.	
DS		2003/0096497 A1	05/2003	Moore et al.	
DT		2003/0107105 A1	06/2003	Kozicki	
DU		2003/0117831 A1	06/2003	Hush	
DV		2003/0128612 A1	07/2003	Moore et al.	
DW		2003/0137869 A1	07/2003	Kozicki	
DX		2003/0143782 A1	07/2003	Gilton et al.	
DY		2003/0156447 A1	08/2003	Kozicki	
DZ		2003/0156463 A1	08/2003	Casper et al.	
DA'		6,473,332 B1	10/2002	Ignatiev et al.	
DB'		5,851,882	12/1998	Harshfield	
DC'		6,440,837 B1	08/2002	Harshfield	
DD'		6,420,725 B1	07/2002	Harshfield	
DE'		5,814,527	09/1998	Wolstenholme et al.	
DF'		5,869,843	02/1999	Harshfield	
DG'		2002/0160551 A1	10/2002	Harshfield	
DH'		6,031,287	02/2000	Harshfield	
DI'		5,818,749	10/1998	Harshfield	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
					T ⁶



PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/076,486
Sheet	2	of	2	Filing Date	February 19, 2002
				First Named Inventor	Stephen L. Casper
				Art Unit	2818
				Examiner Name	M. Tran
				Attorney Docket Number	M4065.0479/P479

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete If Known	
				Application Number	10/076,486
				Filing Date	February 19, 2002
				First Named Inventor	Stephen L. Casper
				Art Unit	2818
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	M4065.0479/P479

U. S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
AA	5,761,115		06/1998	Kozicki et al.	
AB	5,896,312		04/1999	Kozicki et al.	
AC	5,914,893		06/1999	Kozicki et al.	
AD	6,084,796		07/2000	Kozicki et al.	
AE	5,883,827		03/1999	Morgan	

FOREIGN PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
					T ⁶

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²

Examiner Signature	Date Considered
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¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

Docket No.: M4065.0479/P479
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen L. Casper et al.

Application No.: 10/076,486

Group Art Unit: 2818

Filed: February 19, 2002

Examiner: M. Tran

For: **PROGRAMMABLE CONDUCTOR
RANDOM ACCESS MEMORY AND
METHOD FOR SENSING SAME**

THIRD INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the subject matter of the documents be expressly considered during the prosecution of this application and that the documents be made of record therein and appear among the "References Cited" on any patent to issue from this application. A copy of each document is attached.

This Third Information Disclosure Statement is being filed concurrently with an Amendment.

A brief explanation of relevance of certain non-patent documents listed on Form PTO/SB/08 is provided and attached hereto as Appendix A. The brief explanation provided for each document is not tantamount to an admission that a document is "material" or that it qualifies as prior art. The Examiner is respectfully requested to utilize

Appendix A only as a tool by which to better categorize the documents for substantive use in examining the claims of the application.

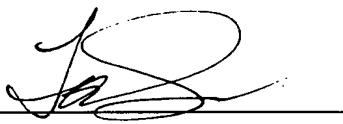
Documents discussed in Appendix A marked with an asterisk (*) are indicated to be potentially more relevant than others. Such marking is provided only to assist the Examiner; however, the Examiner is requested to thoroughly review all documents cited herein.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Third Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. It is submitted that this Third Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider and cite the listed documents.

The Director is hereby authorized to charge the \$180.00 fee as required by 37 C.F.R. §1.17(p) to the undersigned attorneys' credit card. Form PTO-2038 is attached. The Commissioner also is authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm), to our Deposit Account No. 04-1073, under Order No. M4065.0479/P479.

Dated: September 16, 2003

Respectfully submitted,

By 
Thomas J. D'Amico
Registration No. 28,371
Salvatore P. Tamburo
Registration No. 45,153
DICKSTEIN SHAPIRO MORIN &
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Attorneys for Applicants

Inventors: Stephen L. Casper et al.

Atty Docket No.: M4065.0479/P479

Application No.: 10/076,486

Filing Date: February 19, 2002

Title: PROGRAMMABLE CONDUCTOR RANDOM ACCESS MEMORY AND METHOD FOR
SENSING SAME

Documents Filed:

Amendment w/copies 1449 and two date-stamped postcards
Third IDS w/Appendix A, PTO/SB/08A and 79 references
Form PTO-2038
Amendment Transmittal

Via: PTO Daily Run

Sender's Initials: TJD/SPT/rrl

Date: September 16, 2002



D.W.

Docket No.: M4065.0479/P479
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen L. Casper et al.

Application No.: 10/076,486

Group Art Unit: 2818

Filed: February 19, 2002

Examiner: Not Known

For: PROGRAMMABLE CONDUCTOR
RANDOM ACCESS MEMORY AND
METHOD FOR SENSING SAME

SECOND INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the subject matter of the documents be expressly considered during the prosecution of this application and that the documents be made of record therein and appear among the "References Cited" on any patent to issue from this application. A copy of each document is attached.

A brief explanation of relevance of the non-patent documents listed on form PTO/SB/08 is provided and attached hereto as Appendix A. The brief explanation provided for each document is not tantamount to an admission that a document is "material" or that it qualifies as prior art. The Examiner is respectfully requested to utilize Appendix A only as a tool by which to better categorize the documents for substantive use in examining the claims of the application.

Documents discussed in Appendix A marked with an asterisk (*) are indicated to be potentially more relevant than others. Such marking is provided only to assist the Examiner; however, the Examiner is requested to thoroughly review all documents cited herein.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Second Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. It is submitted that the Second Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider and cite the listed documents.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. M4065.0479/P479.

Dated: September 26, 2002

Respectfully submitted,

By 
Thomas J. D'Amico
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Salvatore P. Tamburo
Registration No. 45,153
DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP
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Washington, DC 20037-1526
(202) 785-9700
Attorneys for Applicant(s)

Atty Docket No. 14065.0479/P479 ✓

Inventors: Stephen L. Casper et al.

Application No.: 10/076,486

Filing Date: February 19, 2002

Title: PROGRAMMABLE CONDUCTOR RANDOM ACCESS MEMORY AND METHOD FOR
SENSING SAME

Documents Filed:

Second Information Disclosure Statement w/Form PTO/SB/08A and 170 references



ia: PTO Daily Run

Date: September 26, 2002

ender's Initials: TJD/SPT/rrl

RAW 9/26/02

Docket No.: M4065.0479/P479
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen L. Casper, et al.

Application No.: 10/076,486

Group Art Unit: 2818

Filed: February 19, 2002

Examiner: Not Yet Assigned

For: **PROGRAMMABLE CONDUCTOR
RANDOM ACCESS MEMORY AND
METHOD FOR SENSING SAME**

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08A. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned.

A copy of each reference on PTO/SB/08A is attached.

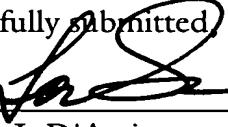
While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that this Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed references.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. M4065.0479/P479. A duplicate copy of this paper is enclosed.

Dated: August 7, 2002

Respectfully submitted,

By 
Thomas J. D'Amico
Registration No.: 28,371
Salvatore P. Tamburo
Registration No.: 45,153
DICKSTEIN SHAPIRO MORIN &
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2101 L Street NW
Washington, DC 20037-1526
(202) 785-9700
Attorneys for Applicant

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Substitute for form 1449A/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/076,486
(use as many sheets as necessary)				Filing Date	February 19, 2002
				First Named Inventor	Stephen L. Casper
				Art Unit	2818
				Examiner Name	M. Tran
Sheet	1	of	4	Attorney Docket Number	M4065.0479/P479

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AA	6,469,364		10/2002	Kozicki	
AB	2002/0168820 App.		11/2002	Kozicki	
AC	2000/0072188 App		6/2002	Gilton	
AD	2002/0123169 App		9/2002	Moore et al.	
AE	2002/0123248 App.		9/2002	Moore et al.	
AF	3,622,319		11/1971	Sharp	
AG	3,743,847		7/1973	Boland	
AH	4,269,935		5/1981	Masters et al.	
AI	4,312,938		1/1982	Drexler, et al.	
AJ	4,316,946		1/1982	Masters, et al.	
AK	4,320,191		3/1982	Yoshikawa et al.	
AL	4,405,710		9/1983	Balasubramanyam et al.	
AM	4,419,421		12/1983	Wichelhaus, et al.	
AN	4,795,657		1/1989	Formigoni et al.	
AO	4,847,674		7/1989	Sliwa et al.	
AP	4,499,557		2/1985	Holmberg et al.	
AQ	5,177,567		1/1993	Klersy et al.	
AR	5,219,788		6/1993	Abernathy et al.	
AS	5,238,862		8/1993	Blalock et al.	
AT	5,315,131		5/1994	Kishimoto et al.	
AU	5,350,484		9/1994	Gardner et al.	
AV	5,360,981		11/1994	Owen et al.	
AW	5,512,328		4/1996	Yoshimura et al.	
AX	5,512,773		4/1996	Wolf et al.	
AY	5,726,083		3/1998	Takaishi	
AA1	5,841,150		11/1998	Gonzalez et al.	
AB1	5,846,889		12/1998	Harbison et al.	
AC1	5,920,788		7/1999	Reinberg	
AD1	5,998,066		12/1999	Block et al.	
AE1	6,077,729		6/2000	Harshfield	
AF1	6,117,720		9/2000	Harshfield	
AG1	6,143,604		11/2000	Chiang et al.	
AH1	6,177,338		1/2001	Liaw et al.	
AI1	6,236,059		5/2001	Wolstenholme et al.	
AJ1	6,297,170		10/2001	Gabriel et al.	
AK1	6,300,684		10/2001	Gonzalez et al.	
AL1	6,316,784		11/2001	Zahorik et al.	
AM1	6,329,606		12/2001	Freyman et al.	
AN1	6,350,679		2/2002	McDaniel et al.	
AO1	6,376,284		4/2002	Gonzalez et al.	
AP1	6,391,688		5/2002	Gonzalez et al.	
AQ1	6,414,376		7/2002	Thakur et al.	
AR1	6,423,628		7/2002	Li et al.	
AS1	6,487,106		11/26/2002	Kozicki	
AT1	5,314,772		5/24/1994	Kozicki	

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

				Complete If Known
Application Number	10/076,486			
Filing Date	February 19, 2002			
First Named Inventor	Stephen L. Casper			
Art Unit	2818			
Examiner Name	M. Tran			
Sheet	2	of	4	Attorney Docket Number

AU1	2002/0190350 APP	12/19/2002	Kozicki	
AV1	2003/0027416 APP	2/6/2003	Moore	
AW1	2003/0001229 APP	1/2/2003	Moore et al.	
AX1	2002/0106849 APP	8/8/2002	Moore.	
AY1	2002/0127886 APP	9/12/2002	Moore et al.	
AZ1	2002/0123170 APP	9/5/2002	Moore et al.	
BA1	2002/0163828 APP	11/2002	Krieger et al	
BB1	6,072,716	6/2000	Jacobson et al.	
BC1	5,272,359	12/93	Nagasubramanian et al.	
BD1	4,671,618	6/87	Wu et al.	
BE1	4,800,526	1/89	Lewis	
BF1	2003/0035314	02/20/03	Kozicki	
BG1	2003/0035315	02/20/03	Kozicki	
BH1	6,314,014	11/6/01	Lowrey et al.	
BI1	5,883,827	3/16/99	Morgan	
BJ1	4,112,512	9/5/78	Arzubi et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/076,486
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				First Named Inventor	Stephen L. Casper
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				Examiner Name	M. Tran
				Attorney Docket Number	M4065.0479/P479

FOREIGN PATENT DOCUMENTS							
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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)					
	BA	JP 56126916		10/1981	Akira et al.		
	BB						

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Filing Date	February 19, 2002
		First Named Inventor	Stephen L. Casper et al.
		Group Art Unit	2818
		Examiner Name	M. Tran
Sheet	4	of	4
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Atty Docket No.: M4065.0479/P479

Inventor: Stephen L. Casper, et al.

Application No.: 10/076,486

Filing Date: February 19, 2002

Title: PROGRAMMABLE CONDUCTOR RANDOM ACCESS MEMORY AND METHOD FOR
SENSING SAME

Documents Filed:

Transmittal (1 page)

Information Disclosure Statement (4 pages; 2 copies)

Form PTO/SB/08A (1 page)

5 U.S. Patent References



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Date: August 7, 2002

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				First Named Inventor	Stephen L. Casper
				Art Unit	2818
				Examiner Name	Not Known
Sheet	1	of	8	Attorney Docket Number	M4065.0479/P479

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
AA	6,388,324		05/14/2002	Kozicki et al.	
AB	US 2002/0000666		01/03/2002	Kozicki et al.	
AC	5,500,532		03/19/1996	Kozicki et al.	
AD	6,418,049		07/09/2002	Kozicki et al.	
AE	5,751,012		05/12/1998	Wolstenholme et al.	
AF	5,789,277		08/04/1998	Zahorik et al.	
AG	6,348,365		02/19/2202	Moore et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
BA	WO 02/21542		03/14/2002	Kozicki et al.	
BB	WO 00/48196		08/17/2000	Kozicki et al.	
BC	WO 97/48032		12/18/1997	Kozicki et al.	
BD	WO 99/28914		06/10/1999	Kozicki et al.	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
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	CA	Abdel-All, A.; Eishafie,A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge5As38Te57 chalcogenide glass, Vacuum 59 (2000) 845-853.			
	CB	Adler, D.; Moss, S.C., Amorphous memories and bistable switches, J. Vac. Sci. Technol. 9 (1972) 1182-1189.			
	CC	Adler, D.; Henisch, H.K.; Mott, S.N., The mechanism of threshold switching in amorphous alloys, Rev. Mod. Phys. 50 (1978) 209-220.			
	CD	Afifi, M.A.; Labib, H.H.; El-Fazary, M.H.; Fadel, M., Electrical and thermal properties of chalcogenide glass system Se75Ge25-xSbx, Appl. Phys. A 55 (1992) 167-169.			
	CE	Afifi, M.A.; Labib, H.H.; Fouad, S.S.; El-Shazly, A.A., Electrical & thermal conductivity of the amorphous semiconductor GexSe1-x, Egypt, J. Phys. 17 (1986) 335-342.			
	CF	Alekperova, Sh.M.; Gadzhieva, G.S., Current-Voltage characteristics of Ag2Se single crystal near the phase transition, Inorganic Materials 23 (1987) 137-139.			
	CG	Aleksieunas, A.; Cesnys, A., Switching phenomenon and memory effect in thin-film heterojunction of polycrystalline selenium-silver selenide, Phys. Stat. Sol. (a) 19 (1973) K169-K171.			
	CH	Angell, C.A., Mobile ions in amorphous solids, Annu. Rev. Phys. Chem. 43 (1992) 693-717.			
	CI	Aniya, M., Average electronegativity, medium-range-order, and ionic conductivity in superionic glasses, Solid state Ionics 136-137 (2000) 1085-1089.			
	CJ	Asahara, Y.; Izumitani, T., Voltage controlled switching in Cu-As-Se compositions, J. Non-Cryst. Solids 11 (1972) 97-104.			
	CK	Asokan, S.; Prasad, M.V.N.; Parthasarathy, G.; Gopal, E.S.R., Mechanical and chemical thresholds in IV-VI chalcogenide glasses, Phys. Rev. Lett. 62 (1989) 808-810			
	CL	Baranovskii, S.D.; Cordes, H., On the conduction mechanism in ionic glasses, J. Chem. Phys. 111 (1999) 7546-7557.			
	CM	Belin, R.; Taillades, G.; Pradel, A.; Ribes, M., Ion dynamics in superionic chalcogenide glasses: complete conductivity spectra, Solid state Ionics 136-137 (2000) 1025-1029.			
	CN	Belin, R.; Zerouale, A.; Pradel, A.; Ribes, M., Ion dynamics in the argyrodite compound Ag7GeSe5I: non-Arrhenius behavior and complete conductivity spectra, Solid State Ionics 143 (2001) 445-455.			
	CO	Benmore, C.J.; Salmon, P.S., Structure of fast ion conducting and semiconducting glassy chalcogenide alloys, Phys. Rev. Lett. 73 (1994) 264-267.			
	CP	Berndede, J.C., Influence du metal des electrodes sur les caracteristiques courant-tension des structures M-Ag2Se-M, Thin solid films 70 (1980) L1-L4.			
	CQ	Berndede, J.C., Polarized memory switching in MIS thin films, Thin Solid Films 81 (1981) 155-160.			
	CR	Berndede, J.C., Switching and silver movements in Ag2Se thin films, Phys. Stat. Sol. (a) 57 (1980) K101-K104.			
	CS	Berndede, J.C.; Abachi, T., Differential negative resistance in metal/insulator/metal structures with an upper bilayer electrode, Thin solid films 131 (1985) L61-L64.			
	CT	Berndede, J.C.; Conan, A.; Fousenan't, E.; El Bouchairi, B.; Goureaux, G., Polarized memory switching effects in Ag2Se/Se/M thin film sandwiches, Thin solid films 97 (1982) 165-171.			
	CU	Berndede, J.C.; Khelil, A.; Kettaf, M.; Conan, A., Transition from S- to N-type differential negative resistance in Al-Al2O3-Ag2-xSe1+x thin film structures, Phys. Stat. Sol. (a) 74 (1982) 217-224.			
	CV	Bondarev, V.N.; Pikhitsa, P.V., A dendrite model of current instability in RbAg4I5, Solid State Ionics 70/71 (1994) 72-76.			
	CW	Boolchand, P., The maximum in glass transition temperature (Tg) near x=1/3 in GexSe1-x			

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete If Known	
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		Glasses, Asian Journal of Physics (2000) 9, 709-72.	
	CX	Boolchand, P.; Bresser, W.J., Mobile silver ions and glass formation in solid electrolytes, Nature 410 (2001) 1070-1073.	
	CY	Boolchand, P.; Georgiev, D.G.; Goodman, B., Discovery of the Intermediate Phase in Chalcogenide Glasses, J. Optoelectronics and Advanced Materials, 3 (2001), 703	
	CZ	Boolchand, P.; Selvanathan, D.; Wang, Y.; Georgiev, D.G.; Bresser, W.J., Onset of rigidity in steps in chalcogenide glasses, Properties and Applications of Amorphous Materials, M.F. Thorpe and Tichy, L. (eds.) Kluwer Academic Publishers, the Netherlands, 2001, pp. 97-132.	
	CA1	Boolchand, P.; Enzweiler, R.N.; Tenhoven, M., Structural ordering of evaporated amorphous chalcogenide alloy films: role of thermal annealing, Diffusion and Defect Data Vol. 53-54 (1987) 415-420.	
	CB1	Boolchand, P.; Grothaus, J.; Bresser, W.J.; Suranyi, P., Structural origin of broken chemical order in a GeSe ₂ glass, Phys. Rev. B 25 (1982) 2975-2978.	
	CC1	Boolchand, P.; Grothaus, J.; Phillips, J.C., Broken chemical order and phase separation in Ge _x Se _{1-x} glasses, Solid state comm. 45 (1983) 183-185.	
	CD1	Boolchand, P., Bresser, W.J., Compositional trends in glass transition temperature (T _g), network connectivity and nanoscale chemical phase separation in chalcogenides, Dept. of ECECS, Univ. Cincinnati (October 28, 1999) 45221-0030.	
	CE1	Boolchand, P.; Grothaus, J., Molecular Structure of Melt-Quenched GeSe ₂ and GeS ₂ glasses compared, Proc. Int. Conf. Phys. Semicond. (Eds. Chadi and Harrison) 17 th (1985) 833-36.	
	CF1	Bresser, W.; Boolchand, P.; Suranyi, P., Rigidity percolation and molecular clustering in network glasses, Phys. Rev. Lett. 56 (1986) 2493-2496.	
	CG1	Bresser, W.J.; Boolchand, P.; Suranyi, P.; de Neufville, J.P., Intrinsically broken chalcogen chemical order in stoichiometric glasses, Journal de Physique 42 (1981) C4-193-C4-196.	
	CH1	Bresser, W.J.; Boolchand, P.; Suranyi, P.; Hernandez, J.G., Molecular phase separation and cluster size in GeSe ₂ glass, Hyperfine Interactions 27 (1986) 389-392.	
	CI1	Cahen, D.; Gilet, J.-M.; Schmitz, C.; Chernyak, L.; Gartsman, K.; Jakubowicz, A., Room-Temperature, electric field induced creation of stable devices in CuInSe ₂ Crystals, Science 258 (1992) 271-274.	
	CJ1	Chatterjee, R.; Asokan, S.; Titus, S.S.K., Current-controlled negative-resistance behavior and memory switching in bulk As-Te-Se glasses, J. Phys. D: Appl. Phys. 27 (1994) 2624-2627.	
	CK1	Chen, C.H.; Tai, K.L., Whisker growth induced by Ag photodoping in glassy Ge _x Se _{1-x} films, Appl. Phys. Lett. 37 (1980) 1075-1077.	
	CL1	Chen, G.; Cheng, J., Role of nitrogen in the crystallization of silicon nitride-doped chalcogenide glasses, J. Am. Ceram. Soc. 82 (1999) 2934-2936.	
	CM1	Chen, G.; Cheng, J.; Chen, W., Effect of Si ₃ N ₄ on chemical durability of chalcogenide glass, J. Non-Cryst. Solids 220 (1997) 249-253.	
	CN1	Cohen, M.H.; Neale, R.G.; Paskin, A., A model for an amorphous semiconductor memory device, J. Non-Cryst. Solids 8-10 (1972) 885-891.	
	CO1	Croitoru, N.; Lazarescu, M.; Popescu, C.; Telnic, M.; and Vescan, L., Ohmic and non-ohmic conduction in some amorphous semiconductors, J. Non-Cryst. Solids 8-10 (1972) 781-786.	
	CP1	Dalven, R.; Gill, R., Electrical properties of beta-Ag ₂ Te and beta-Ag ₂ Se from 4.2 to 300K, J. Appl. Phys. 38 (1967) 753-756.	
	CQ1	Davis, E.A., Semiconductors without form, Search 1 (1970) 152-155.	
	CR1	Deamaley, G.; Stoneham, A.M.; Morgan, D.V., Electrical phenomena in amorphous oxide films, Rep. Prog. Phys. 33 (1970) 1129-1191.	
	CS1	Dejus, R.J.; Susman, S.; Volin, K.J.; Montague, D.G.; Price, D.L., Structure of Vitreous Ag-Ge-Se, J. Non-Cryst. Solids 143 (1992) 162-180.	
	CT1	den Boer, W., Threshold switching in hydrogenated amorphous silicon, Appl. Phys. Lett. 40 (1982) 812-813.	
	CU1	Drusdau, T.P.; Panckow, A.N.; Klabunde, F., The hydrogenated amorphous	

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete If Known	
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				Group Art Unit	2818
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Sheet	4	of	8	Attorney Docket Number	M4065.0479/P479
		silicon/nanodisperse metal (SIMAL) system-Films of unique electronic properties, J. Non-Cryst. Solids 198-200 (1996) 829-832.			
CV1	El Bouchairi, B.; Bernede, J.C.; Burgaud, P., Properties of Ag _{2-x} Se _{1+x} /n-Si diodes, Thin Solid Films 110 (1983) 107-113.				
CW1	El Gharras, Z.; Bourahla, A.; Vautier, C., Role of photoinduced defects in amorphous Ge _x Se _{1-x} photoconductivity, J. Non-Cryst. Solids 155 (1993) 171-179.				
CX1	El Ghrandi, R.; Calas, J.; Galibert, G.; Averous, M., Silver photodissolution in amorphous chalcogenide thin films, Thin Solid Films 218 (1992) 259-273.				
CY1	El Ghrandi, R.; Calas, J.; Galibert, G., Ag dissolution kinetics in amorphous GeSe5.5 thin films from "in-situ" resistance measurements vs time, Phys. Stat. Sol. (a) 123 (1991) 451-460.				
CZ1	El-kady, Y.L., The threshold switching in semiconducting glass Ge ₂₁ Se ₁₇ Te ₆₂ , Indian J. Phys. 70A (1996) 507-516.				
CA2	Elliott, S.R., A unified mechanism for metal photodissolution in amorphous chalcogenide materials, J. Non-Cryst. Solids 130 (1991) 85-97.				
CB2	Elliott, S.R., Photodissolution of metals in chalcogenide glasses: A unified mechanism, J. Non-Cryst. Solids 137-138 (1991) 1031-1034.				
CC2	Elsamanoudy, M.M.; Hegab, N.A.; Fadel, M., Conduction mechanism in the pre-switching state of thin films containing Te As Ge Si, Vacuum 46 (1995) 701-707.				
CD2	El-Zahed, H.; El-Korashy, A., Influence of composition on the electrical and optical properties of Ge ₂₀ BixSe _{80-x} films, Thin Solid Films 376 (2000) 236-240.				
CE2	Fadel, M., Switching phenomenon in evaporated Se-Ge-As thin films of amorphous chalcogenide glass, Vacuum 44 (1993) 851-855.				
CF2	Fadel, M.; El-Shair, H.T., Electrical, thermal and optical properties of Se ₇₅ Ge ₇ Sb ₁₈ , Vacuum 43 (1992) 253-257.				
CG2	Feng, X.; Bresser, W.J.; Boolchand, P., Direct evidence for stiffness threshold in Chalcogenide glasses, Phys. Rev. Lett. 78 (1997) 4422-4425.				
CH2	Feng, X.; Bresser, W.J.; Zhang, M.; Goodman, B.; Boolchand, P., Role of network connectivity on the elastic, plastic and thermal behavior of covalent glasses, J. Non-Cryst. Solids 222 (1997) 137-143.				
CI2	Fischer-Colbrie, A.; Bienenstock, A.; Fuoss, P.H.; Marcus, M.A., Structure and bonding in photodiffused amorphous Ag-GeSe ₂ thin films, Phys. Rev. B 38 (1988) 12388-12403.				
CJ2	Fleury, G.; Hamou, A.; Viger, C.; Vautier, C., Conductivity and crystallization of amorphous selenium, Phys. Stat. Sol. (a) 64 (1981) 311-316.				
CK2	Fritzsche, H., Optical and electrical energy gaps in amorphous semiconductors, J. Non-Cryst. Solids 6 (1971) 49-71.				
CL2	Fritzsche, H., Electronic phenomena in amorphous semiconductors, Annual Review of Materials Science 2 (1972) 697-744.				
CM2	Gates, B.; Wu, Y.; Yin, Y.; Yang, P.; Xia, Y., Single-crystalline nanowires of Ag ₂ Se can be synthesized by templating against nanowires of trigonal Se, J. Am. Chem. Soc. (2001) currently ASAP.				
CN2	Gosain, D.P.; Nakamura, M.; Shimizu, T.; Suzuki, M.; Okano, S., Nonvolatile memory based on reversible phase transition phenomena in telluride glasses, Jap. J. Appl. Phys. 28 (1989) 1013-1018.				
CO2	Guin, J.-P.; Rouxel, T.; Keryvin, V.; Sangleboeuf, J.-C.; Serre, I.; Lucas, J., Indentation creep of Ge-Se chalcogenide glasses below T _g : elastic recovery and non-Newtonian flow, J. Non-Cryst. Solids 298 (2002) 260-269.				
CP2	Guin, J.-P.; Rouxel, T.; Sangleboeuf, J.-C.; Melscoet, I.; Lucas, J., Hardness, toughness, and scratchability of germanium-selenium chalcogenide glasses, J. Am. Ceram. Soc. 85 (2002) 1545-52.				
CQ2	Gupta, Y.P., On electrical switching and memory effects in amorphous chalcogenides, J. Non-Cryst. Sol. 3 (1970) 148-154.				

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M4065.0479/P479				
	CR2	Haberland, D.R.; Stiegler, H., New experiments on the charge-controlled switching effect in amorphous semiconductors, <i>J. Non-Cryst. Solids</i> 8-10 (1972) 408-414.		
	CS2	Haifz, M.M.; Ibrahim, M.M.; Dongol, M.; Hammad, F.H., Effect of composition on the structure and electrical properties of As-Se-Cu glasses, <i>J. Appl. Phys.</i> 54 (1983) 1950-1954.		
	CT2	Hajto, J.; Rose, M.J.; Osborne, I.S.; Snell, A.J.; Le Comber, P.G.; Owen, A.E., Quantization effects in metal/a-Si:H/metal devices, <i>Int. J. Electronics</i> 73 (1992) 911-913.		
	CU2	Hajto, J.; Hu, J.; Snell, A.J.; Turvey, K.; Rose, M., DC and AC measurements on metal/a-Si:H/metal room temperature quantised resistance devices, <i>J. Non-Cryst. Solids</i> 266-269 (2000) 1058-1061.		
	CV2	Hajto, J.; McAuley, B.; Snell, A.J.; Owen, A.E., Theory of room temperature quantized resistance effects in metal-a-Si:H-metal thin film structures, <i>J. Non-Cryst. Solids</i> 198-200 (1996) 825-828.		
	CW2	Hajto, J.; Owen, A.E.; Snell, A.J.; Le Comber, P.G.; Rose, M.J., Analogue memory and ballistic electron effects in metal-amorphous silicon structures, <i>Phil. Mag. B</i> 63 (1991) 349-369.		
	CX2	Hayashi, T.; Ono, Y.; Fukaya, M.; Kan, H., Polarized memory switching in amorphous Se film, <i>Japan. J. Appl. Phys.</i> 13 (1974) 1163-1164.		
	CY2	Hegab, N.A.; Fadel, M.; Sedeek, K., Memory switching phenomena in thin films of chalcogenide semiconductors, <i>Vacuum</i> 45 (1994) 459-462.		
	CZ2	Hirose, Y.; Hirose, H., Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As ₂ S ₃ films, <i>J. Appl. Phys.</i> 47 (1976) 2767-2772.		
	CA3	Hong, K.S.; Speyer, R.F., Switching behavior in II-IV-V ₂ amorphous semiconductor systems, <i>J. Non-Cryst. Solids</i> 116 (1990) 191-200.		
	CB3	Hosokawa, S., Atomic and electronic structures of glassy Ge _x Se _{1-x} around the stiffness threshold composition, <i>J. Optoelectronics and Advanced Materials</i> 3 (2001) 199-214.		
	CC3	Hu, J.; Snell, A.J.; Hajto, J.; Owen, A.E., Constant current forming in Cr/p+a-/Si:H/V thin film devices, <i>J. Non-Cryst. Solids</i> 227-230 (1998) 1187-1191.		
	CD3	Hu, J.; Hajto, J.; Snell, A.J.; Owen, A.E.; Rose, M.J., Capacitance anomaly near the metal-non-metal transition in Cr-hydrogenated amorphous Si-V thin-film devices, <i>Phil. Mag. B</i> 74 (1996) 37-50.		
	CE3	Hu, J.; Snell, A.J.; Hajto, J.; Owen, A.E., Current-induced instability in Cr-p+a-Si:H-V thin film devices, <i>Phil. Mag. B</i> 80 (2000) 29-43.		
	CF3	Iizima, S.; Sugi, M.; Kikuchi, M.; Tanaka, K., Electrical and thermal properties of semiconducting glasses As-Te-Ge, <i>Solid State Comm.</i> 8 (1970) 153-155.		
	CG3	Ishikawa, R.; Kikuchi, M., Photovoltaic study on the photo-enhanced diffusion of Ag in amorphous films of Ge ₂ S ₃ , <i>J. Non-Cryst. Solids</i> 35 & 36 (1980) 1061-1066.		
	CH3	Iyetomi, H.; Vashishta, P.; Kalia, R.K., Incipient phase separation in Ag/Ge/Se glasses: clustering of Ag atoms, <i>J. Non-Cryst. Solids</i> 262 (2000) 135-142.		
	CI3	Jones, G.; Collins, R.A., Switching properties of thin selenium films under pulsed bias, <i>Thin Solid Films</i> 40 (1977) L15-L18.		
	CJ3	Joullie, A.M.; Marucchi, J., On the DC electrical conduction of amorphous As ₂ Se ₇ before switching, <i>Phys. Stat. Sol. (a)</i> 13 (1972) K105-K109.		
	CK3	Joullie, A.M.; Marucchi, J., Electrical properties of the amorphous alloy As ₂ Se ₅ , <i>Mat. Res. Bull.</i> 8 (1973) 433-442.		
	CL3	Kaplan, T.; Adler, D., Electrothermal switching in amorphous semiconductors, <i>J. Non-Cryst. Solids</i> 8-10 (1972) 538-543.		
	CM3	Kawaguchi, T.; Maruno, S.; Elliott, S.R., Optical, electrical, and structural properties of amorphous Ag-Ge-S and Ag-Ge-Se films and comparison of photoinduced and thermally induced phenomena of both systems, <i>J. Appl. Phys.</i> 79 (1996) 9096-9104.		
	CN3	Kawaguchi, T.; Masui, K., Analysis of change in optical transmission spectra resulting from Ag photodoping in chalcogenide film, <i>Japan. J. Appl. Phys.</i> 26 (1987) 15-21.		

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	CO3	Kawasaki, M.; Kawamura, J.; Nakamura, Y.; Aniya, M., Ionic conductivity of Agx(GeSe3)1-x (0<=x<=0.571) glasses, Solid state Ionics 123 (1999) 259-269.			
	CP3	Kluge, G.; Thomas, A.; Klubes, R.; Grotzschel, R., Silver photodiffusion in amorphous Ge _x Se _{100-x} , J. Non-Cryst. Solids 124 (1990) 186-193.			
	CQ3	Kolobov, A.V., On the origin of p-type conductivity in amorphous chalcogenides, J. Non-Cryst. Solids 198-200 (1996) 728-731.			
	CR3	Kolobov, A.V., Lateral diffusion of silver in vitreous chalcogenide films, J. Non-Cryst. Solids 137-138 (1991) 1027-1030.			
	CS3	Korkinova, Ts.N.; Andreichin, R.E., Chalcogenide glass polarization and the type of contacts, J. Non-Cryst. Solids 194 (1996) 256-259.			
	CT3	Kotkata, M.F.; Afif, M.A.; Labib, H.H.; Hegab, N.A.; Abdel-Aziz, M.M., Memory switching in amorphous GeSe _{1-x} chalcogenide semiconductor films, Thin Solid Films 240 (1994) 143-146.			
	CU3	Lakshminarayan, K.N.; Srivastava, K.K.; Panwar, O.S.; Dumar, A., Amorphous semiconductor devices: memory and switching mechanism, J. Instn Electronics & Telecom. Engrs 27 (1981) 16-19.			
	CV3	Lal, M.; Goyal, N., Chemical bond approach to study the memory and threshold switching chalcogenide glasses, Indian Journal of pure & appl. phys. 29 (1991) 303-304.			
	CW3	Leimer, F.; Stotzel, H.; Kottwitz, A., Isothermal electrical polarisation of amorphous GeSe films with blocking Al contacts influenced by Poole-Frenkel conduction, Phys. Stat. Sol. (a) 29 (1975) K129-K132.			
	CX3	Leung, W.; Cheung, N.; Neureuther, A.R., Photoinduced diffusion of Ag in Ge _x Se _{1-x} glass, Appl. Phys. Lett. 46 (1985) 543-545.			
	CY3	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on Se-SnO ₂ system, Jap. J. Appl. Phys. 11 (1972) 1657-1662.			
	CZ3	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on amorphous selenium thin films, Jpn. J. Appl. Phys. 11 (1972) 606.			
	CA4	Mazurier, F.; Levy, M.; Souquet, J.L., Reversible and irreversible electrical switching in TeO ₂ -V ₂ O ₅ based glasses, Journal de Physique IV 2 (1992) C2-185 - C2-188.			
	CB4	Messoussi, R.; Bernede, J.C.; Benhida, S.; Abachi, T.; Latef, A., Electrical characterization of M/Se structures (M=Ni,Bi), Mat. Chem. And Phys. 28 (1991) 253-258.			
	CC4	Mitkova, M.; Boolchand, P., Microscopic origin of the glass forming tendency in chalcogenides and constraint theory, J. Non-Cryst. Solids 240 (1998) 1-21.			
	CD4	Mitkova, M.; Kozicki, M.N., Silver incorporation in Ge-Se glasses used in programmable metallization cell devices, J. Non-Cryst. Solids 299-302 (2002) 1023-1027.			
	CE4	Mitkova, M.; Wang, Y.; Boolchand, P., Dual chemical role of Ag as an additive in chalcogenide glasses, Phys. Rev. Lett. 83 (1999) 3848-3851.			
	CF4	Miyatani, S.-y., Electronic and ionic conduction in (Ag _x Cu _{1-x}) ₂ Se, J. Phys. Soc. Japan 34 (1973) 423-432.			
	CG4	Miyatani, S.-y., Electrical properties of Ag ₂ Se, J. Phys. Soc. Japan 13 (1958) 317.			
	CH4	Miyatani, S.-y., Ionic conduction in beta-Ag ₂ Te and beta-Ag ₂ Se, Journal Phys. Soc. Japan 14 (1959) 996-1002.			
	CI4	Mott, N.F., Conduction in glasses containing transition metal ions, J. Non-Cryst. Solids 1 (1968) 1-17.			
	CJ4	Nakayama, K.; Kitagawa, T.; Ohmura, M.; Suzuki, M., Nonvolatile memory based on phase transitions in chalcogenide thin films, Jpn. J. Appl. Phys. 32 (1993) 564-569.			
	CK4	Nakayama, K.; Kojima, K.; Hayakawa, F.; Imai, Y.; Kitagawa, A.; Suzuki, M., Submicron nonvolatile memory cell based on reversible phase transition in chalcogenide glasses, Jpn. J. Appl. Phys. 39 (2000) 6157-6161.			
	CL4	Nang, T.T.; Okuda, M.; Matsushita, T.; Yokota, S.; Suzuki, A., Electrical and optical parameters of Ge _x Se _{1-x} amorphous thin films, Jap. J. App. Phys. 15 (1976) 849-853.			
	CM4	Narayanan, R.A.; Asokan, S.; Kumar, A., Evidence concerning the effect of topology on			

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Substitute for form 1449B/PTO				Complete If Known	
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				First Named Inventor	Stephen L. Casper
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				Examiner Name	Not Known
Sheet	7	of	8	Attorney Docket Number	M4065.0479/P479

	electrical switching in chalcogenide network glasses, Phys. Rev. B 54 (1996) 4413-4415.				
CN4	Neale, R.G.; Asetline, J.A., The application of amorphous materials to computer memories, IEEE transactions on electron dev. Ed-20 (1973) 195-209.				
CO4	Ovshinsky S.R.; Fritzsche, H., Reversible structural transformations in amorphous semiconductors for memory and logic, Mettalurgical transactions 2 (1971) 641-645.				
CP4	Ovshinsky, S.R., Reversible electrical switching phenomena in disordered structures, Phys. Rev. Lett. 21 (1968) 1450-1453.				
CQ4	Owen, A.E.; LeComber, P.G.; Sarrabayrouse, G.; Spear, W.E., New amorphous-silicon electrically programmable nonvolatile switching device, IEE Proc. 129 (1982) 51-54				
CR4	Owen, A.E.; Firth, A.P.; Ewen, P.J.S., Photo-induced structural and physico-chemical changes in amorphous chalcogenide semiconductors, Phil. Mag. B 52 (1985) 347-362.				
CS4	Owen, A.E.; Le Comber, P.G.; Hajto, J.; Rose, M.J.; Snell, A.J., Switching in amorphous devices, Int. J. Electronics 73 (1992) 897-906.				
CT4	Pearson, A.D.; Miller, C.E., Filamentary conduction in semiconducting glass diodes, App. Phys. Lett. 14 (1969) 280-282.				
CU4	Pinto, R.; Ramanathan, K.V., Electric field induced memory switching in thin films of the chalcogenide system Ge-As-Se, Appl. Phys. Lett. 19 (1971) 221-223.				
CV4	Popescu, C., The effect of local non-uniformities on thermal switching and high field behavior of structures with chalcogenide glasses, Solid-state electronics 18 (1975) 671-681.				
CW4	Popescu, C.; Croitoru, N., The contribution of the lateral thermal instability to the switching phenomenon, J. Non-Cryst. Solids 8-10 (1972) 531-537.				
CX4	Popov, A.I.; Geller, I.KH.; Shemetova, V.K., Memory and threshold switching effects in amorphous selenium, Phys. Stat. Sol. (a) 44 (1977) K71-K73.				
CY4	Prakash, S.; Asokan, S.; Ghare, D.B., Easily reversible memory switching in Ge-As-Te glasses, J. Phys. D: Appl. Phys. 29 (1996) 2004-2008.				
CZ4	Rahman, S.; Sivarama Sastry, G., Electronic switching in Ge-Bi-Se-Te glasses, Mat. Sci. and Eng. B12 (1992) 219-222.				
CA5	Ramesh, K.; Asokan, S.; Sangunni, K.S.; Gopal, E.S.R., Electrical Switching in germanium telluride glasses doped with Cu and Ag, Appl. Phys. A 69 (1999) 421-425.				
CB5	Rose, M.J.; Hajto, J.; Lecomber, P.G.; Gage, S.M.; Choi, W.K.; Snell, A.J.; Owen, A.E., Amorphous silicon analogue memory devices, J. Non-Cryst. Solids 115 (1989) 168-170.				
CC5	Rose, M.J.; Snell, A.J.; Lecomber, P.G.; Hajto, J.; Fitzgerald, A.G.; Owen, A.E., Aspects of non-volatility in a -Si:H memory devices, Mat. Res. Soc. Symp. Proc. V 258, 1992, 1075-1080.				
CD5	Schuocker, D.; Rieder, G., On the reliability of amorphous chalcogenide switching devices, J. Non-Cryst. Solids 29 (1978) 397-407.				
CE5	Sharma, A.K.; Singh, B., Electrical conductivity measurements of evaporated selenium films in vacuum, Proc. Indian Natn. Sci. Acad. 46, A, (1980) 362-368.				
CF5	Sharma, P., Structural, electrical and optical properties of silver selenide films, Ind. J. Of pure and applied phys. 35 (1997) 424-427.				
CG5	Snell, A.J.; Lecomber, P.G.; Hajto, J.; Rose, M.J.; Owen, A.E.; Osborne, I.L., Analogue memory effects in metal/a-Si:H/metal memory devices, J. Non-Cryst. Solids 137-138 (1991) 1257-1262.				
CH5	Snell, A.J.; Hajto, J.; Rose, M.J.; Osborne, L.S.; Holmes, A.; Owen, A.E.; Gibson, R.A.G., Analogue memory effects in metal/a-Si:H/metal thin film structures, Mat. Res. Soc. Symp. Proc. V 297, 1993, 1017-1021.				
CI5	Steventon, A.G., Microfilaments in amorphous chalcogenide memory devices, J. Phys. D: Appl. Phys. 8 (1975) L120-L122.				
CJ5	Steventon, A.G., The switching mechanisms in amorphous chalcogenide memory devices, J. Non-Cryst. Solids 21 (1976) 319-329.				
CK5	Stocker, H.J., Bulk and thin film switching and memory effects in semiconducting chalcogenide glasses, App. Phys. Lett. 15 (1969) 55-57.				

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				Attorney Docket Number	M4065.0479/P479

CL5	Tanaka, K., Ionic and mixed conduction in Ag photodoping process, <i>Mod. Phys. Lett B</i> 4 (1990) 1373-1377.
CM5	Tanaka, K.; Iizima, S.; Sugi, M.; Okada, Y.; Kikuchi, M., Thermal effects on switching phenomenon in chalcogenide amorphous semiconductors, <i>Solid State Comm.</i> 8 (1970) 387-389.
CN5	Thornburg, D.D., Memory switching in a Type I amorphous chalcogenide, <i>J. Elect. Mat.</i> 2 (1973) 3-15.
CO5	Thornburg, D.D., Memory switching in amorphous arsenic triselenide, <i>J. Non-Cryst. Solids</i> 11 (1972) 113-120.
CP5	Thornburg, D.D.; White, R.M., Electric field enhanced phase separation and memory switching in amorphous arsenic triselenide, <i>Journal(?)</i> (1972) 4609-4612.
CQ5	Tichy, L.; Ticha, H., Remark on the glass-forming ability in $GexSe_{1-x}$ and As_xSe_{1-x} systems, <i>J. Non-Cryst. Solids</i> 261 (2000) 277-281.
CR5	Titus, S.S.K.; Chatterjee, R.; Asokan, S., Electrical switching and short-range order in As-Te glasses, <i>Phys. Rev. B</i> 48 (1993) 14650-14652.
CS5	Tranchant, S.; Peytavin, S.; Ribes, M.; Flank, A.M.; Dexpert, H.; Lagarde, J.P., Silver chalcogenide glasses Ag-Ge-Se: Ionic conduction and exafs structural investigation, Transport-structure relations in fast ion and mixed conductors Proceedings of the 6th Riso International symposium, 9-13 September 1985.
CT5	Tregouet, Y.; Bernede, J.C., Silver movements in Ag_2Te thin films: switching and memory effects, <i>Thin Solid Films</i> 57 (1979) 49-54.
CU5	Uemura, O.; Kameda, Y.; Kokai, S.; Satow, T., Thermally induced crystallization of amorphous $Ge_0.4Se_0.6$, <i>J. Non-Cryst. Solids</i> 117-118 (1990) 219-221.
CV5	Uttecht, R.; Stevenson, H.; Sie, C.H.; Griener, J.D.; Raghavan, K.S., Electric field induced filament formation in As-Te-Ge glass, <i>J. Non-Cryst. Solids</i> 2 (1970) 358-370.
CD5	Viger, C.; Lefrancois, G.; Fleury, G., Anomalous behaviour of amorphous selenium films, <i>J. Non-Cryst. Solids</i> 33 (1976) 267-272.
CX5	Vodenicharov, C.; Parvanov, S.; Petkov, P., Electrode-limited currents in the thin-film M-GeSe-M system, <i>Mat. Chem. And Phys.</i> 21 (1989) 447-454.
CY5	Wang, S.-J.; Misium, G.R.; Camp, J.C.; Chen, K.-L.; Tigelaar, H.L., High-performance Metal/silicide antifuse, <i>IEEE electron dev. Lett.</i> 13 (1992) 471-472.
CZ5	Weirauch, D.F., Threshold switching and thermal filaments in amorphous semiconductors, <i>App. Phys. Lett.</i> 16 (1970) 72-73.
CA6	West, W.C.; Sieradzki, K.; Kardynal, B.; Kozicki, M.N., Equivalent circuit modeling of the $Ag As_0.24S_0.36Ag_0.40 Ag$ System prepared by photodissolution of Ag, <i>J. Electrochem. Soc.</i> 145 (1998) 2971-2974.
CB6	West, W.C., Electrically erasable non-volatile memory via electrochemical deposition of multifractal aggregates, <i>Ph.D. Dissertation</i> , ASU 1998
CC6	Zhang, M.; Mancini, S.; Bresser, W.; Boolchand, P., Variation of glass transition temperature, T_g , with average coordination number, $\langle m \rangle$, in network glasses: evidence of a threshold behavior in the slope $ dT_g/d\langle m \rangle $ at the rigidity percolation threshold ($\langle m \rangle = 2.4$), <i>J. Non-Cryst. Solids</i> 151 (1992) 149-154.

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